

Rabbit Hemorrhagic Disease

July 2015

Although it is uncommon in the United States there have been cases in Iowa (2000), Utah (2001), Illinois (2001), New York (2001), Indiana (2005), Minnesota (2010), and Canada (2011). It is considered endemic to Australia, New Zealand, Cuba, parts of Asia and Africa as well as most of Europe. Outbreaks have been experienced in the Middle East, North America, and South America.

What is RHD?

RHD, also known as viral hemorrhagic disease, is a calici viral disease that affects rabbits in the genus *Oryctolagus*. Antibiotics are not effective against viruses. The incubation period is 24 to 48 hours. It causes liver inflammation (hepatitis) and prevents the blood from clotting. Rabbits may die without showing any outward signs of illness, or may show:

- ▶ fever
- ▶ inappetance
- ▶ lethargy
- ▶ spasms
- ▶ breathing difficulties
- ▶ blue colored lips or mucous membranes
- ▶ bleeding from body cavities

Death is due to massive internal hemorrhaging and liver impairment. Eighty to 100 percent of susceptible rabbits developing the disease may die.

Can people or other animals get RHD?

No. The virus only affects rabbits of the genus *Oryctolagus*. This genus includes most show, pet, and laboratory rabbits. Wild rabbits in the U.S., including the cottontail and jackrabbit, are not in the genus *Oryctolagus*, and are not susceptible to RHD. Other types of calici viruses have been found in people, cattle, sea lions, and cats.

As a standard precaution, you should follow appropriate biosecurity precautions to prevent disease introduction to your facility. Biosecurity measures are important to safeguard the health of your rabbits, and include:

- ▶ Avoid unnecessary contact with other people's rabbits. If you must contact other people's rabbits, be sure to wash your hands or shower and change your clothes prior to handling your rabbits.
- ▶ Restrict visitors to your rabbitry and assure that those who visit limit the handling of your animals and take precautions to minimize disease exposure.
- ▶ After visiting a show, fair, or meeting where rabbits were comingled, shower and change clothes before

handling your rabbits.

- ▶ Know the health status of the rabbitry from which you purchase your rabbits.
- ▶ Control insects, birds, rodents, and other wild animals, which may be disease carriers on your facility.
- ▶ Be aware of countries that potential visitors come from. If they are from an endemic country consider appropriate action.
- ▶ If you are planning to travel internationally be aware of their disease status and take steps to avoid introducing RHD to your rabbits.
- ▶ Be aware of the country of origin any equipment or supplies you are considering purchasing originated in.

The virus persists in the environment, and can be transmitted through direct contact with infected rabbits or by indirect contact with objects (cages, feeders, grooming equipment, etc.) or people and their clothing that have been contaminated by rabbit secretions or excretions. Transmission may occur following consumption of contaminated water and food, or exposure to rabbit products (meat, fur skins, offal). Vermin, such as insects or rodents, or domestic animals and birds may also become contaminated with the virus and transfer it to rabbits. The virus may be inhaled, eaten, or absorbed through scrapes and wounds.

Can I vaccinate my rabbit against RHD?

RHD vaccines have not been approved for use in the U.S. The use of an RHD vaccine would make it harder to identify animals with the disease, due to the presence of disease-specific antibodies after vaccination.

Where can I get more information?

Visit CDFA at www.cdca.ca.gov

- ▶ Hand washing
- ▶ Biosecurity Tips for Foreign Travelers

Or Office International des Epizooties at www.oie.int

If your veterinarian suspects RHD, he or she should contact the Animal Health Branch or the USDA- Veterinary Services Area Office

For more information, call:

CDFA Animal Health Branch Offices	
Sacramento (HQ)	916-900-5002
Modesto	209-491-9350
Ontario	909-947-4462
Redding	530-225-2140
Tulare	559-685-3500
USDA/APHIS/VS 916-854-3950 or 877-741-3690	